

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Claims**

The claims have been amended as follows:

1. (Amended) A processor having a plethysmograph waveform input resulting from light attenuated by body tissue with pulsing blood and a pulse recognition output providing information regarding pulses within said waveform input, said processor comprising:

a candidate pulse portion that determines a plurality of potential pulses within said waveform input; and

a physiological model portion that determines the physiologically acceptable ones of said pulses.

12. (Amended) A method of recognizing pulses within a plethysmograph waveform resulting from light attenuated by body tissue with pulsing blood comprising the steps of:

identifying a plurality of potential pulses in said waveform; and

comparing said potential pulses to a physiological pulse model to derive at least one physiologically acceptable pulse.

13. (Amended) The method of Claim ~~13~~12 comprising the further step of generating statistics for said at least one acceptable pulse.

14. (Amended) The method of Claim ~~14~~13 wherein said generating step comprises the steps of:

determining a total period of said at least one acceptable pulse;

calculating the ratio of said total period to a duration of said waveform to derive pulse density.

17. (Amended) The pulse recognition processor of Claim ~~17~~16 further comprising a pulse statistics subprocessor means for determining cumulative pulse characteristics from said pulse output.